



1651 #5  
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Elizabeth M. Denholm, Elizabeth Cauchon, and Paul J. Silver

Serial No.: 09/727,873

Art Unit: 1651

Filed: December 1, 2000

Examiner: M. Meller

For: *ATTENUATION OF FIBROBLAST PROLIFERATION*

Assistant Commissioner for Patents  
Washington, D.C. 20231

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Pursuant to 37 C.F.R. §1.56 and 37 C.F.R. §1.97, Applicants submit an Information Disclosure Statement, including five (5) pages of Form PTO-1449 and a copy of each document cited therein.

Enclosed is a check for \$180.00 representing the fee required under 37 C.F.R. §1.17(p) for an Information Disclosure Statement filed after a first Office Action on the merits under 37 C.F.R. §1.97(c). It is believed that no additional fees are required with this submission. However, should a fee be required, the Commissioner is hereby authorized to charge any fees to Deposit Account No. 50-1868.

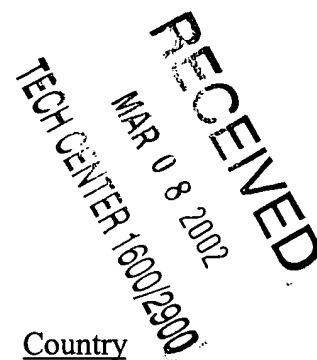
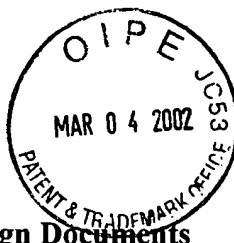
**U.S. Patents**

<u>Number</u>	<u>Issue Date</u>	<u>Patentee</u>	<u>Class/Subclass</u>
5,695,752	12-09-1997	Rosen et al.	424/94.61

03/07/2002 WABDELRI 00000062 09727873

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### Foreign Documents

<u>Number</u>	<u>Publication Date</u>	<u>Patentee</u>	<u>Country</u>
WO 98/46258 A2	10-22-1998	Beth Isreal Deaconess Medical Center, Inc.	PCT
WO 99/484778 A1	09-30-1999	Insight Strategy & Marketing Ltd.	PCT
WO 95/13091 A1	05-18-1995	International Technology Management Associates, Ltd.	PCT
WO 96/01894 A1	01-25-1996	Ibex Technologies Research & Development, Inc.	PCT

### Publications

BENSADOUN, et al. "Proteoglycan deposition in pulmonary fibrosis," *Amer. J. Respir. Crit. Care Med.* 154:1819-1828 (1996).

DENHOLM, "Inhibition of fibroblast by Chondrotinase AC(CAC) and Chondrotinase B(CB)," *FASEB J* 12(5):A948 (1998).

DENHOLM, et al., "Inhibition of human dermal fibroblast proliferation by removal of dermatan sulfate," *European Journal of Pharmacology* 400:145-153 (2000).

DENHOLM & PHAN, "The effects of bleomycin on alveolar macrophage growth factor secretion," *Amer. J. Pathol.* 134:355-363 (1989).

DONATI, et al., "Treatment of hypertrophic and keloid cicatrices with thiomucase," *Minerva Chirurgica* 30(6):326-33 AN-Medline 76196588 (1975).

FANNON & NUGENT, "Basic fibroblast growth factor binds its receptors, is internalized, and stimulates DNA synthesis in Balb/c3T3 cells in the absence of heparan sulfate," *J. Biol. Chem.* 271:17949-17956 (1996).

FORRESTER, et al., "A paradigm for restenosis based on cell biology: clues for the development of new preventive therapies," *J. Am. Coll. Cardiol.* 17:758-769 (1991).

JACKSON, et. al., "Glycosaminoglycans: molecular properties, protein interactions, and role in physiological processes," *Physiol. Rev.* 71:481-530 (1991).

KELLER, et al., "Modulation of cell surface heparan sulfate structure by growth of cells in the presence of chlorate," *Biochem.* 28:8100-8107 (1989).

KJELLEN & LINDAHL, "Proteoglycans: structures and interactions," *Ann. Rev. Biochem.* 60:443-475 (1991).

- LINHARDT, et al., "Polysaccharide lyases," *Appl. Biochem. Biotech.* 12:135-175 (1986).
- LINN, et al. "Isolation and characterization of two chondroitin lyases from *Bacteroides thetaiotaomicron*," *J. Bacteriol.* 156:859-866 (1983).
- LIU & CONNOLLY, "Isolation and characterization of two chondroitin lyases from *Bacteroides thetaiotaomicron*," *Sem. Cutaneous Med. and Surg.* 17:3-11 (1998).
- LYON, et al., "Hepatocyte growth factor/scatter factor binds with high affinity to dermatan sulfate," *J. Biol. Chem.* 273:271-278 (1998).
- MAEDA, et al., "6B4 proteoglycan/phosphacan, an extracellular variant of receptor-like protein-tyrosine phosphatase zeta/RPTPbeta, binds pleiotrophin/heparin-binding growth-associated molecule (HB-GAM)," *J. Biol. Chem.* 271:21446-21452 (1996).
- MIAO, et al., "Heparan sulfate primed on beta-D-xylosides restores binding of basic fibroblast growth factor," *J. Cell. Biochem.* 57:173-184 (1995).
- MICHELACCI, et. al., "Isolation and characterization of an induced chondroitinase ABC from *Flavobacterium heparinum*," *Biochim. Biophys. Acta.* 923:291-201 (1987).
- MILEV, et al., "The core protein of the chondroitin sulfate proteoglycan phosphacan is a high-affinity ligand of fibroblast growth factor-2 and potentiates its mitogenic activity," *J. Biol. Chem.* 273:21439-21442 (1998).
- PENC & GALLO, "Dermatan sulfate released after injury is a potent promoter of fibroblast growth factor-2 function," *J. Biol. Chem.* 273:28116-28121 (1998).
- PHAN & KUNKEL, "Lung cytokine production in bleomycin-induced pulmonary fibrosis," *Exper. Lung Res.* 18:29-43 (1992).
- RICHARDSON & HATTON, "Transient morphological and biochemical alterations of arterial proteoglycan during early wound healing," *Exp. Mol. Pathol.* 58:77-95 (1993).
- SATO, et. al., "Submit structure of Chondroitinase ABC from *Proteus vulgaris*," *Agric. Biol. Chem.* 50:1057-1059 (1986).
- SCHMIDT, et al., "The antiproliferative activity of arterial heparan sulfate resides in domains enriched with 2-O-sulfated uronic acid residues," *J. Biol. Chem.* 267:19242-19247 (1992).
- SCHWARTZ, "Regulation of chondroitin sulfate synthesis. Effect of beta-xylosides on synthesis of chondroitin sulfate proteoglycan, chondroitin sulfate chains, and core protein," *J. Biol. Chem.* 252:6316-6321 (1977).

SEGARINI, et al., "Binding of transforming growth factor-beta to cell surface proteins varies with cell type," *Molecular Endocrinol.* 3:261-272 (1989).

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VLODAVSKY, et al., "Control of cell proliferation by heparan sulfate and heparin-binding growth factors," *Thrombosis Haemostasis* 74:534-540 (1995).

YAMAGATA, et al., "Purification and properties of bacterial chondroitinases and chondrosulfatases," *J. Biol. Chem.* 243:1523-1535 (1968).

YAYON, et al., "Cell surface, heparin-like molecules are required for binding of basic fibroblast growth factor to its high affinity receptor," *Cell* 64:841-848 (1991).

YEO, et al. Alterations in proteoglycan synthesis common to healing wounds and tumors," *Amer. J. Pathol.* 138:1437-1450 (1991).

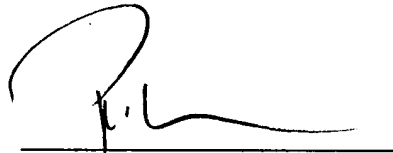
ZHANG, et. al., "In situ hybridization analysis of rat lung alpha 1(I) and alpha 2(I) collagen gene expression in pulmonary fibrosis induced by endotracheal bleomycin injection," *Lab. Invest.* 70: 192-202 (1994).

U.S.S.N.: 09/727,873  
Filed: December 1, 2000  
INFORMATION DISCLOSURE STATEMENT

### Remarks

This statement should not be interpreted as a representation that an exhaustive search has been conducted or that no better art exists. Moreover, Applicants invite the Examiner to make an independent evaluation of the cited art to determine its relevance to the subject matter of the present application. Applicants are of the opinion that their claims patentably distinguish over the art referred to herein, either alone or in combination.

Respectfully submitted,



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Patrea L. Pabst  
Reg. No. 31,284

Dated: February 7, 2002

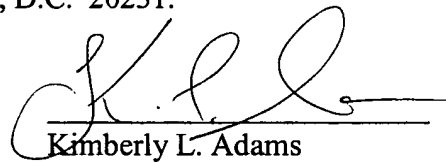
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Application Number	09/727,873
				Filing Date	December 1, 2000
				First Named Inventor	Elizabeth M. Denholm
				Group Art Unit	1651
				Examiner Name	M. Meller
Sheet	2	of	5	Attorney Docket Number	IT 105

OTHER ART – NON PATENT LITERATURE DOCUMENTS			
Examiner's Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
		BENSADOUN, et al. "Proteoglycan deposition in pulmonary fibrosis," <i>Amer. J. Respir. Crit. Care Med.</i> 154:1819-1828 (1996).	✓
		DENHOLM & PHAN, "The effects of bleomycin on alveolar macrophage growth factor secretion," <i>Amer. J. Pathol.</i> 134:355-363 (1989).	✓
		DENHOLM, "Inhibition of fibroblast by Chondroitinase AC(CAC) and Chondroitinase B(CB)," <i>FASEB J</i> 12(5):A948 1998).	✓
		DENHOLM, et al., "Inhibition of human dermal fibroblast proliferation by removal of dermatan sulfate," <i>European Journal of Pharmacology</i> 400:145-153 (2000).	✓
		DONATI, et al., "Treatment of hypertrophic and keloid cicatrices with thiomucase," <i>Minerva Chirurgica</i> 30(6):326-33 AN-Medline 76196588 (1975).	✓
		FANNON & NUGENT, "Basic fibroblast growth factor binds its receptors, is internalized, and stimulates DNA synthesis in Balb/c3T3 cells in the absence of heparan sulfate," <i>J. Biol. Chem.</i> 271:17949-17956 (1996).	✓
		FORRESTER, et al., "A paradigm for restenosis based on cell biology: clues for the development of new preventive therapies," <i>J. Am. Coll. Cardiol.</i> 17:758-769 (1991).	✓
		JACKSON, et al., "Glycosaminoglycans: molecular properties, protein interactions, and role in physiological processes," <i>Physiol. Rev.</i> 71:481-530 (1991).	✓
		KELLER, et al., "Modulation of cell surface heparan sulfate structure by growth of cells in the presence of chlorate," <i>Biochem.</i> 28:8100-8107 (1989).	✓
		KJELLEN & LINDAHL, "Proteoglycans: structures and interactions," <i>Ann. Rev. Biochem.</i> 60:443-475 (1991).	✓

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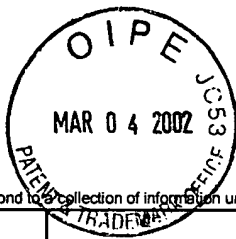
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Application Number	09/727,873
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First Named Inventor	Elizabeth M. Denholm
Group Art Unit	1651
Examiner Name	M. Meller
Attorney Docket Number	IT 105

Sheet 3 of 5

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		MILEV, et al., "The core protein of the chondroitin sulfate proteoglycan phosphacan is a high-affinity ligand of fibroblast growth factor-2 and potentiates its mitogenic activity," <i>J. Biol. Chem.</i> 273:21439-21442 (1998).	
		PENC & GALLO, "Dermatan sulfate released after injury is a potent promoter of fibroblast growth factor-2 function," <i>J. Biol. Chem.</i> 273:28116-28121 (1998).	
		PHAN & KUNKEL, "Lung cytokine production in bleomycin-induced pulmonary fibrosis," <i>Exper. Lung Res.</i> 18:29-43 (1992).	

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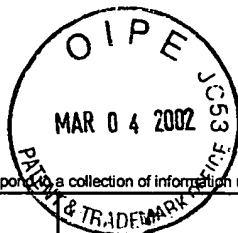
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First Named Inventor

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Attorney Docket Number

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December 1, 2000

Elizabeth M. Denholm

1651

M. Meller

IT 105

Sheet

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of

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## **OTHER ART - NON PATENT LITERATURE DOCUMENTS**

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